



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

SP

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/914,995   | 01/18/2002  | Norbert Becker       | 3286-0168P          | 7874             |
| 30596  | 7590        | 03/08/2005           | EXAMINER            |                  |
| HARNESS, DICKEY & PIERCE, P.L.C.<br>P.O.BOX 8910<br>RESTON, VA 20195 |             |                      | LY, ANH             |                  |
|  |             | ART UNIT             |                     | PAPER NUMBER     |
|  |             |                      |                     | 2162             |

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                           |                         |  |
|------------------------------|---------------------------|-------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b>    | <b>Applicant(s)</b>     |  |
|                              | 09/914,995                | BECKER ET AL.           |  |
|                              | <b>Examiner</b><br>Anh Ly | <b>Art Unit</b><br>2162 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 01 March 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-27 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Request Continued Examination***

1. The request filed on 02/20/2003 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/914,995 is acceptable and a RCE has been established. An action on the RCE follows.
2. Claims 26-27 are newly added.
3. Claims 1-27 are pending in this application.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,119,125 issued to Gloudeman et al. (hereinafter Gloudeman) in view of US Patent No. 6,263,492 issued to Fraley et al. (hereinafter Fraley).

With respect to claim 1, Gloudeman teaches supplying, via the objects, an identifying designation of a type of respective representative to the engineering system (each object in the system is identified by an access key object: col. 19, lines 38-45);

creating, via the engineering system, corresponding representatives for the designated types and, for each of the representatives (building an automation system containing objects: col. 1, lines 40-58);

and having, based upon the reference, each representative read out engineering information from the object (the objects are read out by using Read and Signup method: col. 6, lines 55-65).

Gloudeman discloses constructing building automation applications, which are providing a computer software architecture supporting object-oriented software system as well as application for engineering for creating sets of applications for each device environment (col. 1, lines 40-50 and col. 4, lines 5-10), uploading object data to designated intermediate storage device (col. 27, lines 8-14), and objects in the system are referenced as indexes via slot indexes. Gloudeman does not explicitly indicate entering a reference to the object.

However, Fraley teaches objects are entered into a table, from which a pointer or referencing of an object is stored (col. 6, lines 60-67 and col. 7, lines 18-22).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Gloudeman with the teachings of Fraley, wherein the standard objects for application in the system to be constructed as provided therein (Gloudeman's fig 4), would incorporate the use of runtime objects of the system, in the same conventional manner as described by Fraley (fig. 6 and abstract). The motivation being to provide the connections between objects and a control logic sequence in order to solve a problem or meet a customer need and to collect of objects defined the components of an application in the automation system.

With respect to claim 2, Gloudeman teaches supplying, for devices on which the automation objects run, an identifying designation of a type of respective device representative to the engineering system, creating, via the engineering system, corresponding device representatives for the designated types and having, based upon the reference, each device representative read out engineering information from the device and, wherein, in a second step for the restoration of representatives of the automation objects in the engineering system, the method further comprises, supplying, via the automation objects, an identifying designation of a type of respective representative to the engineering system, creating, via the engineering system, Corresponding representatives for the designated types, and having, based upon the reference, each representative read out engineering information from the automation object (each object in the system is identified by an access key object: col. 19, lines 38-

45; and building an automation system containing objects: col. 1, lines 40-58; and the objects are read out by using Read and Signup method: col. 6, lines 55-65).

Gloudeman teaches constructing building automation applications, which are providing a computer software architecture supporting object-oriented software system as well as application for engineering for creating sets of applications for each device environment (col. 1, lines 40-50 and col. 4, lines 5-10), uploading object data to designated intermediate storage device (col. 27, lines 8-14), and objects in the system are referenced as indexes via slot indexes. Gloudeman does not explicitly indicate entering for each of the device representatives or to the automation object, a reference to the device , entering a reference to the object.

However, Fraley teaches objects are entered into a table, from which a pointer or referencing of an object is stored (col. 6, lines 60-67 and col. 7, lines 18-22).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Gloudeman with the teachings of Fraley, wherein the standard objects for application in the system to be constructed as provided therein (Gloudeman's fig 4), would incorporate the use of runtime objects of the system, in the same conventional manner as described by Fraley (fig. 6 and abstract). The motivation being to provide the connections between objects and a control logic sequence in order to solve a problem or meet a customer need and to collect of objects defined the components of an application in the automation system.

With respect to claim 3, Gloudeman discloses supplying, via the devices, lists with communication relationships to the engineering system (col. 4, lines 31-67); and converting, in the engineering system, entries of the lists into references to inputs and outputs of the representatives of the automation objects and, subsequently, setting up corresponding connections up in the engineering system (col. 9, lines 25-42 and col. 12, lines 44-52).

With respect to claim 4, Gloudeman discloses wherein both the objects of the engineering system and the objects of the automation system are described by a uniform, executable object model and a direct communication at model level is possible between the objects of the engineering system and the objects of the automation system (col. 3, lines 38-67, col. 4, lines 1-10, col. 6, lines 12-46 and col. 7, lines 54-62; also see fig. 2; level of object model).

With respect to claim 5, Gloudeman discloses wherein entries in the lists with communication relationships contain sources and drains of the communication relationships, the sources and drains in each case being described by a triple from an identifier of the device, an identifier of the automation object and an identifier of the input or output (col. 9, lines 4-42).

With respect to claim 6, Gloudeman discloses wherein the objects of the automation system have no direct reference to the associated objects of the engineering system, to make it possible for the engineering system and automation system to be separated (col. 22, lines 55-67 and col. 23, lines 1-10).

With respect to claim 7, Gloudeman discloses wherein, the method is used for the updating of already existing engineering information as a delta method. (col. 17, lines 55-67 and col. 18, lines 1-32; also col. 27, lines 4-14).

Claim 8 is essentially the same as claim 1 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 1 hereinabove.

Claim 9 is essentially the same as claim 2 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 2 hereinabove.

Claim 10 is essentially the same as claim 3 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 3 hereinabove.

Claim 11 is essentially the same as claim 4 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 4 hereinabove.

Claim 12 is essentially the same as claim 5 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 5 hereinabove.

Claim 13 is essentially the same as claim 6 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 6 hereinabove.

Claim 14 is essentially the same as claim 7 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 7 hereinabove.

With respect to claims 15-16, Gloudeman discloses wherein both the objects of the engineering system and the objects of the automation system are described by a uniform, executable object model and a direct communication at model level is possible between the objects of the engineering system and the objects of the automation system (col. 3, lines 38-67, col. 4, lines 1-10, col. 6, lines 12-46 and col. 7, lines 54-62; also see fig. 2; level of object model).

With respect to claims 17-19, Gloudeman discloses wherein entries in the lists with communication relationships contain sources and drains of the communication relationships, the sources and drains in each case being described by a triple from an identifier of the device, an of the automation object and an identifier of the input or output (col. 9, lines 4-42).

Claims 20-21 are essentially the same as claims 15-16 except that they are directed to a system rather than a method, and are rejected for the same reason as applied to the claims 15-16 hereinabove.

Claims 22-24 are essentially the same as claims 17-19 except that they are directed to a system rather than a method, and are rejected for the same reason as applied to the claims 17-19 hereinabove.

With respect to claim 25, Gloudeman teaches wherein the first step for the restoration of device representatives in the engineering system is initiated from a software system (col. 2, lines 28-42 and col. 3, lines 4-16).

With respect to claim 26, Gloudeman teaches supplying, via the runtime automation objects, identifiers each identifying a type of respective representative, corresponding to one of the runtime automation objects, to the engineering system (each object in the system is identified by an access key object: col. 19, lines 38-45);

creating, via the engineering system, for each of the types, a corresponding engineering representative and entering a reference to the corresponding runtime automation object in each of the representatives (building an automation system containing objects: col. 1, lines 40-58);

and having, each engineering representative read out engineering data from the corresponding runtime automation object (the objects are read out by using Read and Signup method: col. 6, lines 55-65).

Gloudeman discloses constructing building automation applications, which are providing a computer software architecture supporting object-oriented software system as well as application for engineering for creating sets of applications for each device environment (col. 1, lines 40-50 and col. 4, lines 5-10), uploading object data to designated intermediate storage device (col. 27, lines 8-14), and objects in the system are referenced as indexes via slot indexes. Gloudeman does not explicitly indicate entering a reference to the object and runtime objects in the system.

However, Fraley teaches objects are entered into a table, from which a pointer or referencing of an object is stored (col. 6, lines 60-67 and col. 7, lines 18-22) and runtime objects in the computer system (see abstract, fig. 6 and col. 9, lines 3-24 and col. 7, lines 24-38 and lines 50-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Gloudeman with the teachings of Fraley, wherein the standard objects for application in the system to be constructed as provided therein (Gloudeman's fig 4), would incorporate the use of runtime objects of the system, in the same conventional manner as described by Fraley (fig. 6 and abstract). The motivation being to provide the connections between objects and a control logic sequence in order to solve a problem or meet a customer need and to collect of objects defined the components of an application in the automation system.

Claim 27 is essentially the same as claim 26 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 26 hereinabove.

### Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or via E-Mail: [ANH.LY@USPTO.GOV](mailto:ANH.LY@USPTO.GOV) or fax to (571) 273-4039. The examiner can normally be reached on TUESDAY – THURSDAY from 8:30 AM – 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (571) 272-4107 or Primary Examiner Jean Corrielus (571) 272-4032.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, or faxed to: Central Fax Center (703) 872-9306

ANH LY  
MAR. 3<sup>rd</sup>, 2005



JEAN M. CORRIELUS  
PRIMARY EXAMINER